1125, Clay Community Schools

PROJECT ABSTRACT

Through the use of Learning Technologies Competitive Grant funding, Clay Community Schools (CCS) will implement a technology integration program to improve math and science classroom instruction, student learning and mastery of Indiana Academic Standards, and student enrollment in rigorous math and science courses for all 6th through 12th grade students. CCS will partner with Ivy Tech State College and Rose-Hulman Institute of Technology to improve mastery level of math and science standards and career/postsecondary preparation of at risk and underachieving students. Student outcomes will include:

- Goal One: At risk students in grades 6 through 12 will improve math and science performance on ISTEP+ and Core 40 End of Course Assessments (ECAs).
- Goal Two: Underachieving students in grades 6 through 12 will improve math and science performance on ISTEP+, Core 40 ECAs, and Advanced Placement tests.
- Goal Three: Student enrollment in dual credit and Advanced Placement math and science courses will increase.

CCS will leverage its partnership with Rose-Hulman Institute of Technology (RHIT) to provide math and science teachers with 21st Century science, technology, engineering, and math (STEM) digital learning tools through its Portal Resources for Indiana Science and Mathematics (PRISM) project. A RHIT specialist will utilize PRISM to provide teachers with a library of over 2,500 online resources that mirror the digital tools available in the modern workplace and at postsecondary institutions. Math and science teachers will also receive training and full access to an online learning environment (Moodle) that provides course management tools and supports exciting new ways to engage students beyond the traditional "lecture and worksheet" education delivery methods.

Ivy Tech State College will partner with CCS through its outreach programs that provide early intervention for sophomores and juniors, dual enrollment for juniors and seniors, and college transition support for seniors. Ivy Tech's COMPASS online assessment system will play a key role in ensuring the success of the outreach programs. COMPASS online diagnostic tests will be used to confirm that students meet the prerequisites needed for entry into college-level courses and identify specific skill areas in which students may need additional help. If students are not on track, online intervention learning solutions will be put in place while students are still in high school.

CCS math and science teachers will also be provided opportunities to create and post lessons as they collaborate on using technology tools and professional development knowledge gained through postsecondary partnerships. In addition, white boards, LCD projectors, laptop computers, and student response systems will be purchased to provide additional technology tools needed to help improve students' academic performance through the creation of more participatory learning environments that challenge students to be more accountable for their learning through self progress monitoring and increases student engagement through teacher developed lessons that require students to demonstrate the acquisition of knowledge in ways that are more technologically advanced and beyond the traditional norms of assessment.

CCS will provide high quality, sustained professional development to ensure and further the effective use of technology in the classroom; thus increasing student achievement and participation in rigorous math and science courses. Professional development will be collaborative, ongoing, sustainable, and research based.

Qualitative and quantitative data will be used to document progress. The project leadership team will monitor achievement of student learning outcomes. The tracking of key errors from various formative and summative assessments will provide the necessary data for remediation focus, differentiation of instruction, and future curriculum development.